

REMARKS

Entry of the foregoing, reexamination and reconsideration of the subject application are respectfully requested in light of the amendments above and the comments which follow.

As correctly noted in the Office Action Summary, claims 28-47, 49, 50 and 55 were pending, of which claims 45-47, 49, 50 and 55 are withdrawn from consideration. By the present response, claims 28, 34 and 36 have been amended, and claims 56-60 have been added. Thus, upon entry of the present response, claims 28-47, 49, 50, and 55-60 are pending and await further consideration on the merits.

Support for the foregoing amendments can be found, for example, in at least the following locations in the original disclosure: page 7, lines 6-9; page 11, lines 3-10 and 27-30; page 12, lines 7-11, 15-18 and 22-28; and the original claims.

Entry of the foregoing is appropriate pursuant to 37 C.F.R. §1.116 for at least the following reasons. First, the amendments clearly place the application in condition for allowance. Second, the amendments place the application in better form for an appeal.

Applicants wish to thank Examiners Vanoy and Hanor for the courtesies extended applicants' representative during a personal interview conducted on October 27, 2008. During the interview, applicants' representative highlighted certain distinctions between the process of the presently claimed invention and that described in the applied prior art. Specifically, it was asserted that U.S. Patent No. 5, 876, 494 to *Bomal et al.* does not disclose maintaining a pH between 7-8 during the addition of silicate and acidifying agent to the feedstock solution. It was also

asserted that *Bomal et al.* does not disclose maintaining the concentration of silicon, expressed as SiO₂, during the entire process of addition to a concentration level less than or equal to 35 g/l. Certain clarifying amendments were also discussed, including the possibility of clarifications concerning the constitution of the reaction medium, and maintenance of the pH value in a relatively constant manner, in contrast to the multiple pH plateaus described by *Bomal et al.*

ELECTION/RESTRICTIONS

Applicants note that the restriction requirement of September 10, 2007 has been made final. Applicants note that each of the withdrawn claims depend either directly or indirectly upon claim 28. Thus, rejoinder of these claims is believed to appropriate in the event that claim 28 is deemed allowable. Thus, the withdrawn claims have been maintained by the present response.

CLAIM REJECTIONS UNDER 35 U.S.C. §102

Claims 28-44 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,876,494 to Bomal et al. (hereafter "*Bomal et al.*") on the grounds set forth on page 3 of the Official Action. For at least the reasons noted below, this rejection should be withdrawn.

The present invention is directed to processes for preparing precipitated silicas that exhibit low water uptake properties.

A process performed according to the principles of the present invention is set forth in amended claim 28. Amended claim 28 recites:

28. A process for preparing a low water-uptake precipitated silica, comprising the following successive steps:

- (a) producing an initial feedstock comprising a silicate, the silicate concentration in the feedstock, expressed in SiO_2 equivalent, being less than 15 g/l;
- (b) adding an acidifying agent to form an acidified feedstock, bringing the pH of the medium to a value of between 7 and 8 ;
- (c) simultaneously adding a silicate and an acidifying agent to the feedstock resulting from step (b) to form a reaction medium, the respective amounts of added silicate and acidifying agent over time being specifically selected such that, throughout the entire addition:
- the pH of the reaction medium remains between 7 and 8;
 - the silicon concentration in the reaction medium, expressed in SiO_2 equivalent, remains less than or equal to 35 g/l;
- (d) adding an acidifying agent to the reaction medium resulting from step (c), so as to bring the reaction medium to a pH of between 3 and 6.5; and
- (e) filtering the resulting aqueous silica dispersion, then drying the filter cake obtained at the end of the filtering step.

As evident from the above, claim 28 requires, *inter alia*, simultaneously adding a silicate and an acidifying agent to the feedstock to form a reaction medium, with the entire addition satisfying the additional requirement of "the pH of the reaction medium remains between 7 and 8," and "the silicon concentration in the reaction medium, expressed in SiO_2 equivalent, remains less than or equal to 35 g/l." It is respectfully submitted that *Bomal et al.* fails to disclose at least these aspects of the presently claimed invention.

With respect to the pH, *Bomal et al.* discloses:

In stage (iii) it is possible to undertake the simultaneous addition of acidifying agent and of silicate at a first pH plateau of the reaction mixture, pH_1 , and then at a second pH plateau of the reaction mixture, pH_2 , such that $7 < \text{pH}_2 < \text{pH}_1 < 9$. (Column 5, lines 1-5)

However, this disclosure fails to satisfy the above-quoted limitation of claim 28. In contrast to the above-quoted disclosure of *Bomal et al.*, the process of claim 28 requires maintaining pH throughout the entire addition of silicate and acidifying agent in a manner that maintains the pH below 8. *Bomal et al.* clearly teaches away from such a process step, wherein *Bomal et al.* teaches an addition step of acidifying

agent and silicate in a manner which establishes multiple pH plateaus or values with at least one of these plateaus possibly exceeding a pH of 8 (see, e.g., Example 1, Col. 11, lines 6-12). Thus, *Bomal et al.* fails to anticipate the process of claim 28.

With respect to the silicon concentration in the reaction medium, the closest disclosure of *Bomal et al.* is believed to be:

(iii) acidifying agent and a silicate of alkali metal M are added simultaneously to the reaction mixture such that the ratio of the quantity of silicate added (expressed as SiO_2) the quantity of silicate present in the initial base stock (expressed as SiO_2), called the degree of consolidation, is greater than 4 and at most 100. . . . (Column 3, lines 7-12).

It is believed that the above-noted quantity of silicate "added" refers to the silicate quantity, or concentration, as measured prior to combination with the acidified initial feedstock solution. By contrast, claim step (c) of claim 28 of the present invention requires that the silicon concentration in the reaction medium be maintained at a level which is less than or equal to 35 g/l. Thus, the above-described "degree of consolidation" is a different parameter than that recited in step (c) of claim 28. Thus, *Bomal et al.* also fails to disclose at least this aspect of amended claim 28 as well.

For at least the reasons noted above, reconsideration and withdrawal of the rejection is respectfully requested.

The remaining claims, including newly presented claims 56-60, depend either directly or indirectly upon claim 28. Thus, these claims are also distinguishable over *Bomal et al.* for at least the same reasons noted above.

OBVIOUSNESS-TYPE DOUBLE PATENTING

Claim 28 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 25 of U.S. Patent Application No. 10/583,417 on the grounds set forth on page 4 of the Official Action. Applicants continue to traverse the grounds for rejection, and believe that the grounds for rejection clearly fail to establish a *prima facie* case of obviousness which would satisfy the requirements of *Graham v. John Deere*. In any event, in the interest of advancing prosecution, applicants have submitted herewith a properly executed Terminal Disclaimer over U.S. Patent Application No. 10/583,417. Accordingly, the rejection is moot and should be withdrawn.

Claim 28 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 57 of U.S. Patent Application No. 11/921,073 on the grounds set forth on page 5 of the Official Action. Applicants continue to traverse the grounds for rejection, and believe that the grounds for rejection clearly fail to establish a *prima facie* case of obviousness which would satisfy the requirements of *Graham v. John Deere*. In any event, in the interest of advancing prosecution, applicants have submitted herewith a properly executed Terminal Disclaimer over U.S. Patent Application No. 11/921,073. Accordingly, the rejection is moot and should be withdrawn.

CONCLUSION

From the foregoing, further and favorable action in the form of a Notice of Allowance is earnestly solicited. Should the Examiner feel that any issues remain, it is requested that the undersigned be contacted so that any such issues may be adequately addressed and prosecution of the instant application expedited.

Respectfully submitted,

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